

## PERFORM WHERE OTHERS CAN'T

**PACIFIC**AEROSPACE





THIS AIRCRAFT HAS SUCH UNIQUE EXTREMELY SHORT TAKE-OFF AND LANDING (XSTOL™) CAPABILITIES THAT IT DEMANDED A CLASS OF ITS OWN. THE RESULT OF MORE THAN SIXTY YEARS OF EVOLUTION, THE P-750 XSTOL IS THE WORLD'S FIRST XSTOL™ AIRCRAFT UNMATCHED BY ANY OTHER PRODUCTION AIRCRAFT.

#### The XSTOL™ delivers unsurpassed capability to provide:

- > Take-off and landing in less than 800ft (244m) at MTOW, even when it's hot and high.
- > Operate off semi-prepared strips in all types of terrain.
- > Carry a load of almost 4,000lb (1,814kg) even in hot and high conditions.
- > Rugged, dependable construction with extended airframe/engine inspection intervals of 150hrs.
- > Proven, globally-supported components from leading aerospace companies, including Pratt & Whitney Canada, Garmin, Hartzell and Honeywell.









800 ft /244 m



### **PACIFIC**AEROSPACE

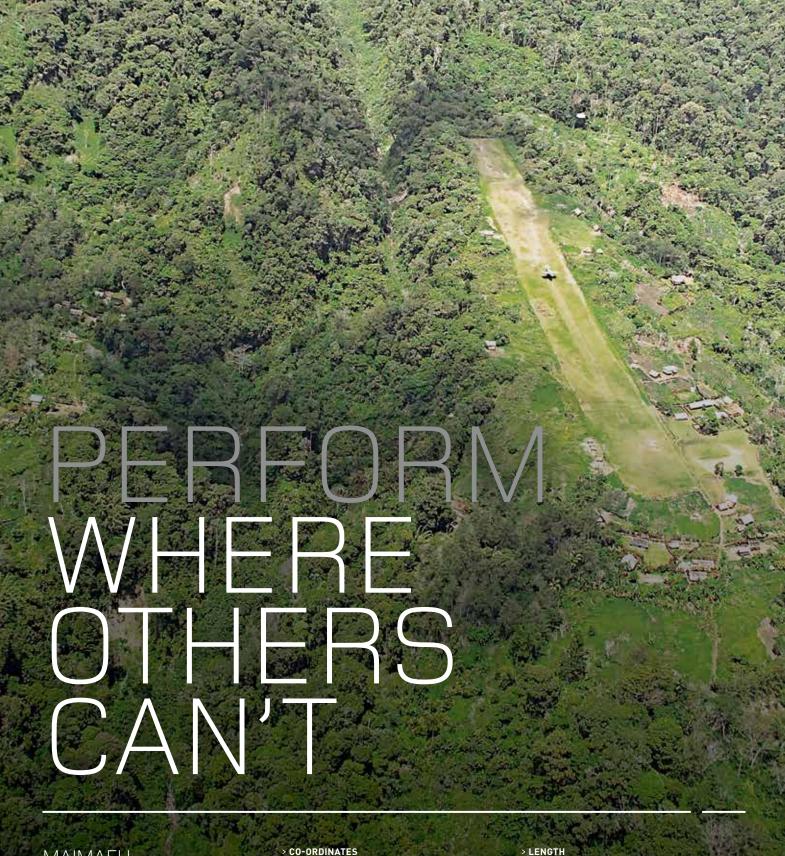
THE P-750 XSTOL IS THE LATEST AIRCRAFT FROM PACIFIC AEROSPACE AND HAS CONSISTENTLY PROVEN ITSELF WHILE OPERATING IN SOME OF THE TOUGHEST ENVIRONMENTS AN AIRCRAFT CAN FACE.

Since PAL started manufacturing aircraft in 1954, its manufacturing facility in Hamilton, New Zealand has produced more than 600 extraordinarily capable aircraft. Pacific Aerospace has built an excellent name for rugged aircraft that are easy to fly and maintain and are optimised for every job they undertake.

"The P-750 XSTOL performs where others can't. Our customers' success is our success."

DAMIAN CAMP, CHIEF EXECUTIVE OFFICER, PACIFIC AEROSPACE LTD.





MAIMAFU, EASTERN HIGHLANDS, PAPUA NEW GUINEA

> CO-ORDINATES

06 30.10'S 145 02.02'E

> ALTITUDE

5,200ft/1,585m

> TEMPERATURE

Average 30°C+/86°F+

1,450ft / 442m

> SLOPE OVERALL

15% / max >18%

> TAKE-OFF PAYLOAD

3,900 lb/1,769 kg\*

\*Based on an aircraft with an Empty Weight of 3600lbs, equipped for Basic VFR flight

#### PERFORMANCE ENHANCED PROFIT

ACCESS MORE STRIPS, MORE OFTEN, WITH MORE PAYLOAD. THE XSTOL™ CAN ACCESS TWICE AS MANY OF THE WORLD'S LANDING STRIPS COMPARED TO OTHER UTILITY AIRCRAFT, AND IT DOES SO WHILE CARRYING 3,900 LB / 1,769 KG,\* GREATER THAN ITS EMPTY WEIGHT.

While some of these strips can be reached by small six-seater aircraft carrying small loads, the XSTOL™ has proven its ability, in the toughest environments, to carry up to three times the load of other aircraft off the same airstrips, achieving in two hours what previously took a whole day's flying to complete.

Its unmatched reliability and low maintenance costs provides you with an aircraft that maximises profitability and can get the job done, allowing you to make a profit on routes that were previously marginal.

#### XSTOL™ Performance Demonstration

AFRICA AEROSPACE & DEFENCE EXPO, AIR FORCE BASE YSTERPLAAT, CAPE TOWN, SOUTH AFRICA,

DATE: 19TH SEPTEMBER 2008 ELEVATION: 200FT (61M), WIND: 10KTS, TEMP: 12°C (53.6°F)

At AAD2008, renowned South African pilot Chris Briers flying a standard production P-750 XSTOL weighing 4,200lb (1,909kg) and complete with cargo pod, put the aircraft through its paces. The demonstration climaxed in Chris achieving a take-off distance of less than 140ft (32m) and a landing distance of 164ft (50m). This crowdpleasing demonstration left no uncertainty to the extreme STOL performance and manoeuvrability of the P-750 XSTOL.

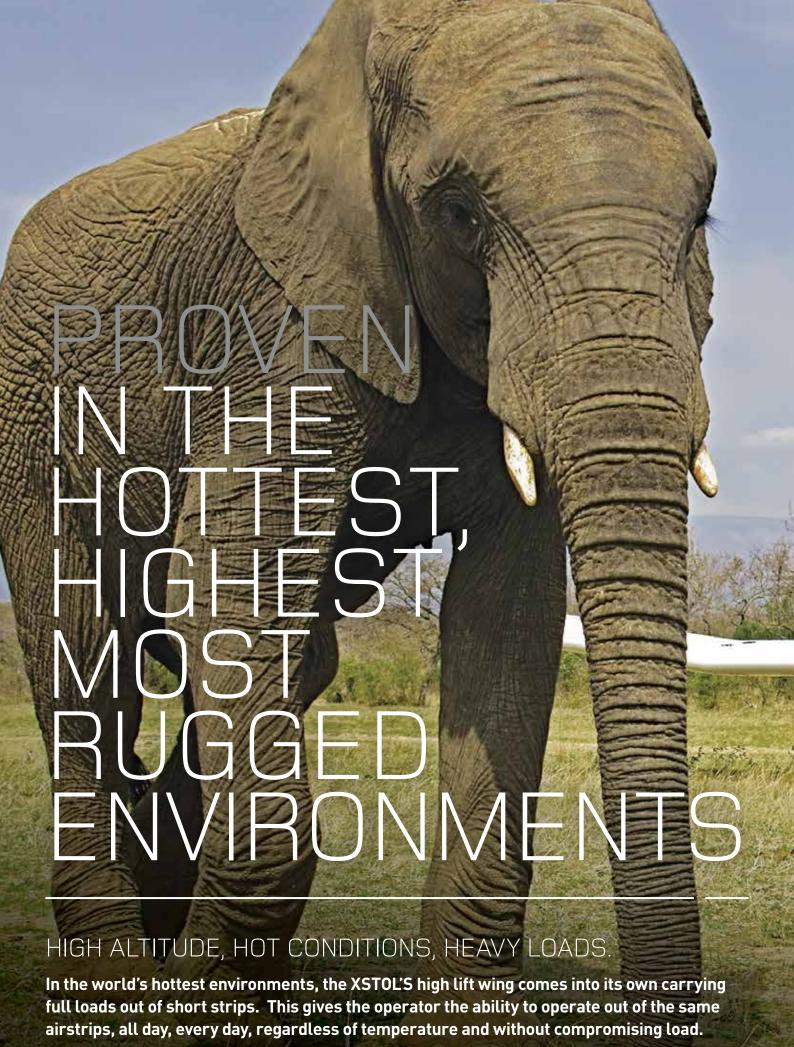
TO VIEW THE DEMONSTRATION PLEASE VISIT WWW.AEROSPACE.CO.NZ



104<sup>ft</sup> /32<sup>m</sup>



 $164^{\rm ft}/50^{\rm m}$ 







## MAXIMUM UTILITY THROUGH QUICK TURN-AROUND

A MULTI-TASKER THAT MAKES THE MOST OF EVERY MINUTE.



The P-750 XSTOL is designed to get the job done and every attention has been given to ensure that it is a reliable aviation workhorse – there to get the job done and generate the maximum profit for its operators.

Quick turnarounds, essential for productivity, are facilitated by double rear cabin doors and a large single compartment cargo pod with a rear



ramp enabling the XSTOL™ to be quickly loaded and unloaded. The configuration of the aircraft can be quickly changed between passenger and cargo roles within 30 minutes. All the standard passenger seats can be removed and stowed in either the storage compartment at the rear of the cabin, or in the cargo pod for quick conversion between roles on return leqs.



# TOUGH RELIABLE, EASY TO MAINTAIN & OPERATE

**READY TO DEPART** 

AIRCRAFT ONLY
MAKE MONEY
WHEN THEY ARE
FLYING: THE
XSTOL™ IS READY
TO FLY MORE
THAN ANY OTHER
AIRCRAFT.

#### Low Maintenance

With its 150-hour airframe/engine inspection interval, the XSTOL™ has lower maintenance requirements than any comparable aircraft. The aircraft has been designed to be easily maintained and embodies over sixty years of knowledge and experience gained from previous models of Pacific Aerospace agricultural aircraft. These aircraft average five minute flight cycles with maximum loads and operate from remote semi-prepared strips in New Zealand hill country, all day every day. A tough proving ground.

#### Easy To Refuel And Check

With its low wing the XSTOL™ is easy to refuel, wherever it is positioned. Pre-flight checks and refuelling can be carried out without a ladder, unlike high wing aircraft.

Not only is turnaround faster, it's safer – especially in bad weather.

By utilising well proven, reliable and globally-supported systems – such as Pratt & Whitney Canada PT6A-34 turboprop engines, Hartzell props and Garmin avionics – we can ensure that high-quality, reliable support is always within reach anywhere in the world.

#### **Quality Components**

By utilising well proven, reliable and globally-supported systems – such as Pratt & Whitney Canada PT6A-34 turboprop engines, Hartzell props and Garmin avionics – we can ensure that high-quality, reliable support is always within reach anywhere in the world.

## VERSATILE

ONE PLANE, SO MANY APPLICATIONS

The P-750 XSTOL is the world's most versatile utility aircraft. This PT6 turbine powered aircraft has a unique quick-change modular floor system and easily removable role equipment, which allows the aircraft to be transformed rapidly between no less than ten distinct mission configurations.

The quick change, multirole floor allows P-750 operators to move easily between different role configurations to maximise aircraft utilisation. The different configurations include passenger/freight; agriculture solid and liquid; firebombing; survey geophysical and photographic; medical evacuation; skydiving; and surveillance, search & rescue.





#### Passenger / Utility

- > Sets the benchmark for 10-seater STOL utility aircraft.
- > Ample passenger leg room and luggage storage.
- Able to undertake mixed passenger/ freight roles.
- Can carry a load of passengers on one leg, then rapidly convert to an all-freight configuration for the next leg by stowing the passenger seats in a rear cabin compartment.
- No need for a tail stand when loading the aircraft.
- > Sub-dividable single compartment Cargo Pod with 1,000lb (454kg) capacity.
- Option of moulded or metal linings in the cabin for increased durability.

#### Skydive

- > Globally recognised as the ultimate skydiving platform.
- > Achieve profit with small loads i.e make a profit with seven jumpers.
- > Able to carry seventeen skydivers or seven tandem teams.
- > Unmatched ability to climb rapidly to jump height e.g. sea level to 12,000ft in ten minutes.
- Factory-installed skydiving door that can be operated by the pilot ensuring no open-door speed restrictions on descent
- Climb and descent profile is about half the horizontal airspace of most other jump planes, assisting operation in noise-sensitive areas.
- > Wide centre of gravity range making it a very stable jump platform.



#### Freight/Cargo

- > Optional wall-mounted track for use with cargo nets.
- Large 50" wide, 46.5" high
   (127cm x 118cm) cargo door.
- Single-compartment (sub-dividable)
   Cargo Pod with 1,000lb (454kg) capacity
   and access via three side cargo doors
   and one large rear ramp.
- > Cargo compartment partition located behind the pilot providing load security.
- > Wide centre of gravity range allowing for loading flexibility.
- > No need for a tail stand when loading the aircraft.

#### **Aerial Survey**

- Superior stability even at low speed allows the aircraft to undertake survey roles usually reserved for helicopters.
- Factory-approved modifications support easy installation of camera holes in the floor of the aircraft.
- > No requirement for control cable rerouting or any other customisation of the aircraft systems.
- > Can be readily customer-modified for geophysical survey work.
- Electrically 'quiet' aircraft with minimal electro-magnetic interference and all major control systems mechanical rather than electric.
- The aircraft structure serves as an effective faraday cage blocking out external static electric fields.

## Agriculture – Solid / Liquid and Firebombing

- > Able to carry a 4,888lb (2,217kg) hopper.
- Effectively operates off short, narrow hill country air strips that are often situated on ridgelines.
- > Operators commonly complete up to 17 cycles (load, take-off, dispense, land) per hour.
- Hopper can be removed without affecting the airframe, allowing versatility in the roles of the aircraft.
- Aircraft can be converted to anothe factory-approved configuration, maximising its useful life and resale value.

### P-750 XSTOL KEY FEATURES

#### 01

Easy access 'gull wing' crew doors.

#### 02

High visibility cockpit for superior situation awareness for the pilot.

#### 03

04

05

06

07

the inlet.

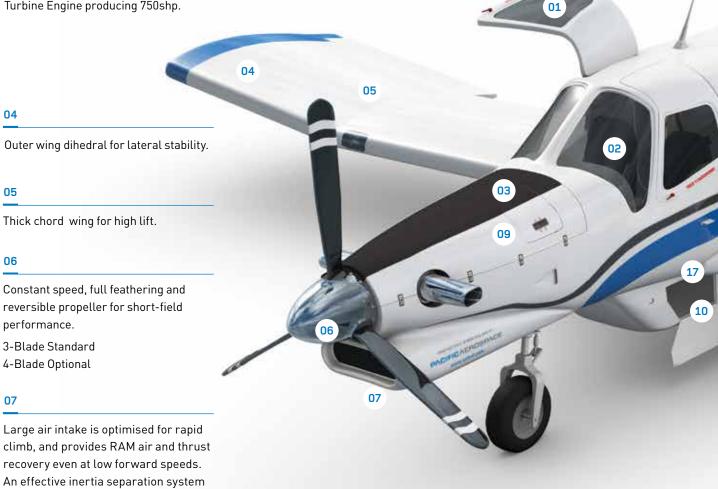
Well proven and globally supported Pratt & Whitney Canada PT6A-34 Turbine Engine producing 750shp.

#### 80

Large 240ft<sup>3</sup> cabin with the ability for it to be rapidly reconfigured between roles.

#### 09

Easily removed engine cowling allowing for complete access to the engine and systems.



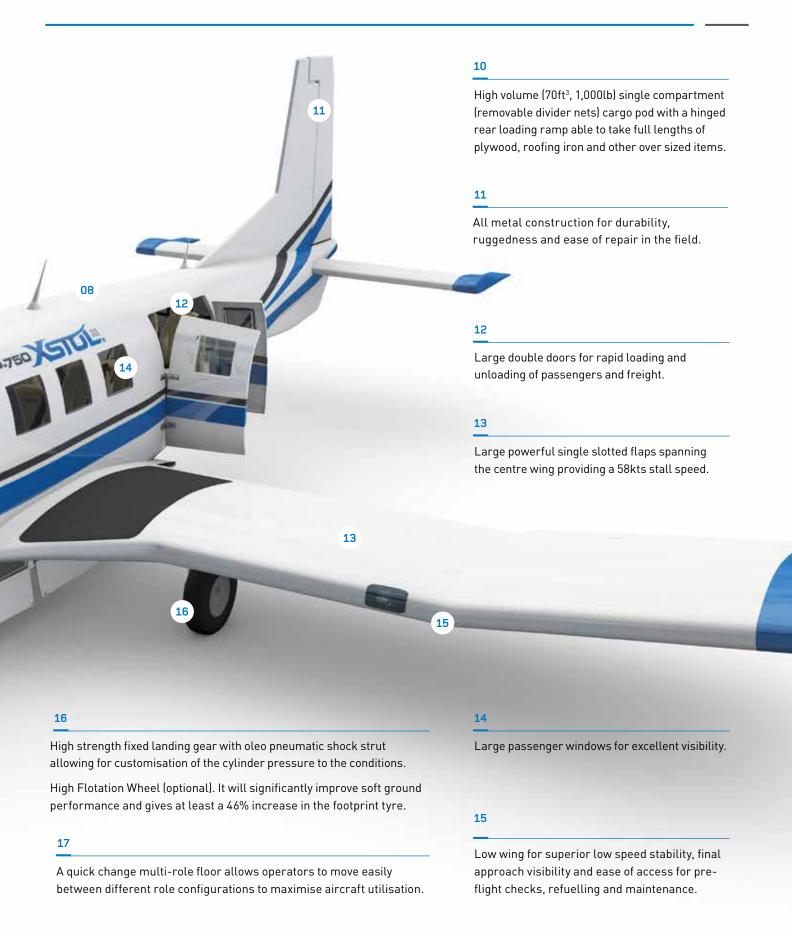


for FOD protection is incorporated in



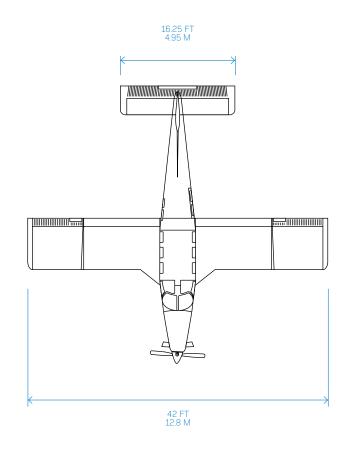


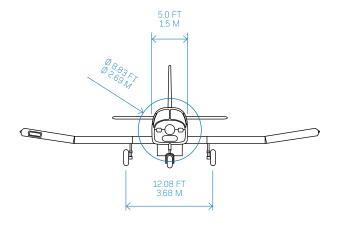


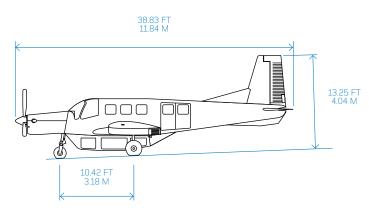


## **EXTERNAL DIMENSIONS**

> WING GROSS	
305.00 FT <sup>2</sup>	28.34 M <sup>2</sup>
> NETT	
267.80 FT <sup>2</sup>	24.88 M <sup>2</sup>
> FLAPS	
31.74 FT <sup>2</sup>	$2.95 \text{ M}^2$
> AILERONS	
21.94 FT <sup>2</sup>	2.04 M <sup>2</sup>
> TAILPLANE	
33.64 FT <sup>2</sup>	$3.13 \text{ M}^2$
> ELEVATOR	
27.92 FT <sup>2</sup>	$2.59 \text{ M}^2$
> FIN	
19.40 FT <sup>2</sup>	1.80 M <sup>2</sup>
> RUDDER	
11.70 FT <sup>2</sup>	1.09 M <sup>2</sup>

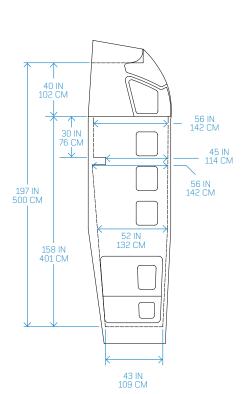


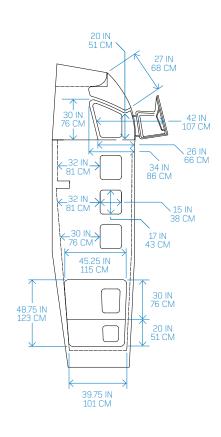


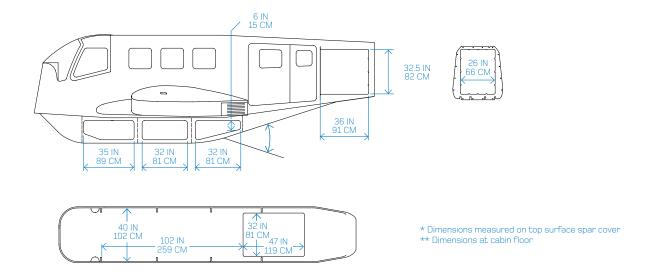


## **INTERNAL DIMENSIONS**









## **TECHNICAL SPECIFICATIONS**

> WEIGHT AND BALANCE		
BASIC EMPTY WEIGHT (Standard IFR)	3,600 lbs*	1,633 kgs*
*Basic Empty Weight is complete aircraft, empty of usable fuel and without optional equipment, but inc BEW will vary between aircraft serial numbers depending upon final configuration and equipment spe		
MAXIMUM OPERATING WEIGHTS		
Maximum Ramp Weight	7,540 lb	3,420 kg
Maximum Take-Off Weight	7,500 lb	3,402 kg
Maximum Landing Weight	7,125 lb	3,232 kg
Maximum Useful Load	3,900 lb	1,769 kg
Centre of Gravity Range	102.8 to 124.60 inches aft of datum	
	2.3% to 28.5% MAC (Mean Aerodynar	nic Chord)
> SPEEDS		
TAS (True Air Speed) 10,000 FT	167 kts	309 km/h
Never Exceed Speed (VNE)	170 kts	315 km/h
Design Cruising Speed (Vc)	140 kts	259 km/h
Maximum Manoeuvring Speed (VA)	131 kts	243 km/h
Maximum Flap Extended Speed (VFE)	120 kts	222 km/h
Stall Speed (Idle Power) With Flaps Up (VS)	58 kts	107 km/h
> RANGE		
Max. Range at Optimum Speed (nil wind, no reserves), 15,000ft.	1,172 nm	2,183 km
Endurance at Optimum Speed (no reserves)	8 hrs Standard	10 hrs w/ Aux.Fuel.
Average Fuel Consumption (optimum cruise settings)	49 US Gal/hr	184 Litres/hr
Fuel Capacity (useable)	330 US Gal	1,256 Litres
Max. Range with Aux. Fuel Tank fitted (102US.Gal/387L usable)**	1,400 nm	2,593 km

 $<sup>\</sup>ensuremath{^{**}\text{Estimate}}$  based on optimum cruise settings, nil wind and nil reserves.

### **PERFORMANCE**

#### > TAKE-OFF & LANDING PERFORMANCE

Nil wind, 7,500 MTOW, Aircraft optimised for STOL performance (flight test data not yet published in POH)

Take-Off Ground Roll at Sea Level, ISA	721 ft	220 m
Take-Off Distance To 15 m (50 ft), ISA	1,503 ft	458 m
Landing Ground Roll at Sea Level**	543 ft	166 m
Landing Distance From 15 m (50 ft)**	950 ft	289 m

<sup>\*\*</sup>Reverse thrust selected on touchdown

#### CLIMB (AT MTOW)

Maximum Rate of Climb at Sea Level	1,067 ft/min	325 m/min
Maximum Rate of Climb at 8,000 FT	951 ft/min	290 m/min
Climb to 12,000 FT From Brakes Release	14 min	

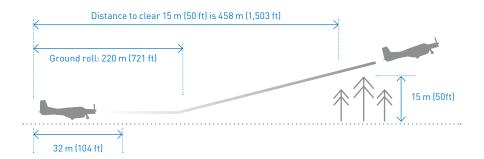
#### **ALTITUDE LIMITS**

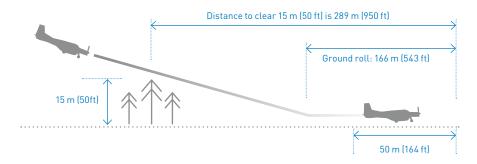
Maximum Operating Altitude	20,000 ft***	6,096 m
Service Ceiling (at Max. Weight)	25,000 ft****	7,620 m

<sup>\*\*\*</sup>Demonstrated to 32,000ft. Approval pending for certification to 25,000ft. \*\*\*\*Estimate based on previous flight testing.

#### CLIMB (AT MTOW)

Maximum Positive G	+3.5 G	
Maximum Negative G	-1.4 G	
Wing Loading	120.07 KG/M <sup>2</sup>	24.59 LB/FT <sup>2</sup>
Power Loading	10.0 LB/SHP	4.5 KG/SHP





 $\mathsf{XSTOL}^\mathsf{T}$  extreme demonstration (refer to page 7)



## THE ULTIMATE MULTI-ROLE AIRCRAFT QUICK CHANGE BETWEEN ALL MISSIONS























